

# Occupational Therapy: An Intervention to Improve the Quality of Life for Mental Disorder Patients in Community

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**Abstract:** The issues for post-hospital disorder patients include facing stigma, having low self-esteem, avoiding social contact, and losing friends. Patients with mental disorders such as schizophrenia have worse quality of life than other patients in general, even compared to patients with physical illnesses. However, rehabilitation for patients with mental disorders could be facilitated through occupational therapy. This research aims to determine the effect of occupational therapy on the quality of life for mental disorders patients. The research population was all patients with mental disorders in Kebasen Community Health Center (Puskesmas) in Central Java, Indonesia. The sample of 50 patients was divided into two groups: 25 in the intervention group and 25 in the control group. The intervention group was given occupational therapy and drug therapy treatment for four weeks, while the control group was only given drug therapy. The effect of occupational therapy on quality of life was tested by *paired t-test*. Research results showed a significant difference in the quality of life score before and after the occupational therapy treatment for the intervention group (*p-value* 0.00). In contrast, the control group received no significant difference in the quality of life score before and after (*p-value* 0.07). Also, there was a notable contrast in the mean difference of quality of life scores between the intervention and control groups (*p-value* 0.00). Occupational therapy has a significant effect on improving the quality of life for mental disorder patients in the community. It could be used as rehabilitative therapy for treating mental disorder patients to help improve their quality of life.

**Keywords:** Occupational Therapy, Quality Of Life, Mental Disorder.

## 1. Introduction

According to WHO, there were 450 million people with mental disorders, including schizophrenia, in 2017. The prevalence of households with mental disorders in Indonesia based on Indonesia Basic Health Research in 2018 increases to 7 people per mile. Judging from the aspect of Years Lived with Disability (YLDs), mental disorders are the highest cause, with 14.4% in the world, 13.5% in Southeast Asia, and 13.4% in Indonesia (Indrayani & Wahyudi, 2019). Keogh, B et al. in Birken, M, Henderson, C & Slade M, (2018) stated that the problems faced by mental disorders patients after hospital treatment include facing stigma, having low self-esteem, avoiding social contact, and losing friends.

Mental disorders may lead to a decrease in one's ability to do work and carry out daily activities (Shorten & Crouch, 2014). The stigma experienced by mental disorder patients decreases self-esteem and impaired quality of life (Oliveira et al., 2016). A study on 65 patients with mental disorders in hospitals showed the impaired quality of life in terms of health, family, recreational activities, work, and social relationships. The average score of satisfaction in the quality of life was 49.0-69.1 (scale 0-100) (Pitkänen et al., 2009).

Tertiary prevention measures are needed for people with a mental health condition in the form of rehabilitative nursing care (Stuart, G.W, 2007). The purpose is to return the patient to functional performance equal to or higher than the function

level before the illness. Hospitalization effects and symptoms of mental disorders often cause patients to lose their roles or jobs. In this case, occupational therapy helps integrate patients into their daily lives (Shorten & Crouch, 2014). Occupational therapy is an action that could be applied to all ages with cognitive, physical, and sensory disorders, intending to help achievement in all aspects of life (Himabindhu, 2020).

The development of outdoor or community occupational therapy through Graduating Living Skill Outside the Ward (GLOW) method is the occupational therapy method to strengthen self-care abilities, leisure, productive activities, increase the ability to organize daily routine activities, and increase enthusiasm (Birken, M, Henderson, C & Slade M, 2018). Occupational therapy could be applied to mental disorder patients by providing cooking, art, crafts, pottery, sports, calligraphy, horticulture, and music organized individually or in groups. Patients with mental disorders who follow occupational therapy show clinically significant improvements in social function and cognition, which positively impact the trained works, skills, or abilities (Petersen et al., 2019).

Kebasen Community Health Center in Central Java Province, Indonesia, is one of the health centers with excellent mental health care. The number of people with a mental health condition in the area will be 111 patients in January 2020. Management of mental disorders patients includes treatment routine, examination, and granting referral if needed, but there is no psychotherapy as rehabilitation therapy.

## 2. Method

The research design in this research was "*Quasy experimental pre and posttest with control group*." The research is conducted to determine the effect of occupational therapy on improving the quality of life of patients with mental disorders in the community. The research population was all patients with mental disorders in Kebasen Community Health Center in Central Java Province, Indonesia. The total sample for intervention and control groups was 50 respondents. The sampling method was "purposive sampling" with the following criteria: a) Recovery stage mental disorder patients; b) Willing to take part in research activities to completion, represented by a person in charge (family); c) Follow regular medication; and d) Having family members who can treat them at home/a caregiver (Syed, 2020; DeForge & Belcher, 2005; Xiao et al., 2019).

The research instrument used the WHOQOL-BREF quality of life questionnaire consisting of 26 questions and a Likert scale of 1-5 with a score range of 26-130 to assess the quality of life of mental disorder patients through physical, psychological, social, and environmental dimensions (WHO, 2012). The instrument was filled in by the respondents, assisted by their family and research team. The intervention group received occupational therapy for four weeks with self-care activities, productive activities, and making use of leisure and drug therapy. Self-care activities include personal hygiene exercises, eating, toileting, and taking medicine. Productive activities or life skills include training on making brooms, starting from preparing materials, making the brooms, to practicing selling them to neighbors

(Ledbetter & Batey, 1981; Nightengale, 1990; Belcher & Deforge, 2005). At the same time, the education on using leisure includes doing hobbies, sports, watching television and others.

On the other hand, the control group only received drug therapy. The differences in the quality of life of mental disorders patients before and after occupational therapy in the community were analyzed using *paired t-test*. Meanwhile, the differences in quality of life in the two groups (intervention and control groups) were tested by *an independent t-test*.

### 3. Result and Discussion

The result of research on occupational therapy is family-based therapy to improve the quality of life of individuals with mental disorders explain the characteristics of the respondents as described in table 1 and table 2.

**Tabel 1. Distribution of Mental Disorder Patients based on Gender, Education Level, and Employment**  
(n=50)

Characteristics	Intervention Group		Control Group		Total	
	N	%	N	%	N	%
Gender						
1. Male	18	72,0	13	52,0	31	62,0
2. Female	7	28,0	12	48,0	19	38,0
Education						
1. Elementary	2	8,0	3	12,0	4	8,0
2. Junior High	11	44,0	12	48,0	24	48,0
3. Senior High	12	48,0	10	40,0	22	44,0
Employment						
1. Unemployed	19	76,0	17	68,0	36	72,0
2. Employed	6	24,0	8	32,0	14	28,0

Source: Data Proceed

From Table 1, it is inferred that the number of male patients with a mental disorder was higher with 31 respondents (62%) than female patients with a total of 19 respondents (38%). Based on education level, 24 respondents had junior high education level (48%), 22 respondents had senior high education level (44.0%), and the remaining four respondents had elementary education level (8%). Based on employment, 36 respondents were unemployed (72%).

**Tabel 2. Distribution of Mental Disorder Patients by Age**  
(n=50)

Characteristic	N	Average	SD	SE	Min-Max
Age					
Intervention	25	36,28	9,93	1,74	19-52
Control	25	37,92	8,76	1,75	23-56
Total	50	37,10	8,67	1,22	19-56

Source: Data Proceed

Table 2 shows that the average age of patients with mental disorders was 36.28 years old, with the youngest 19 years old and the oldest 56 years old. Table 3. describes the quality of life scores of mental disorders patients before and after the treatment.

Table 3 below explains that the average score in the quality of life of the intervention group was from 53.08 to 64.08. In the control group, the average quality of life score was 52.96 before and 53.24 after treatment.

In conclusion, there is a significant difference in the quality of life score before and after occupational therapy in the intervention group marked by a *p-value* of 0.00. In contrast, the control group had no significant difference in the quality of life score before and after *p-value* 0.07.

**Tabel 3. Differences in Mental Disorder Patients' Quality of Life Scores in the Intervention and Control Groups Before and After Occupational Therapy**  
(n=50)

Variable	N	Average	SD	SE	Min-Max	p-value
Intervention Group	25					0.00
Before		53,08	7,28	1,46	42-68	
After		64,08	7,99	1,59	50-80	
Control Group	25					0.07
Before		52,96	7,18	1,45	43-68	
After		53,24	7,45	1,49	43-68	

Source: Data Proceed

Table 4. describes the score difference in the quality of life for mental disorder patients before and after treatment in the two groups.

**Tabel 4. Mean Difference in the Quality of Life Score of Mental Disorders Patients Before and After Treatment in the Intervention and Control Groups**  
(n=50)

Variable	N	Group	Mean Difference	p-value
Quality of life score	25 25	Intervention control	11,00 0,28	0.00

Table 4 shows that the mean difference between pre and post-quality of life scores in the intervention group is 11.00, while the control group is only 0.28. It can

be concluded that there is a notable contrast in the mean difference in the quality of life scores between the intervention and control groups with a *p-value* of 0.00.

### **Characteristics of Mental Disorders Patients**

The results showed that the number of mental disorder patients is predominantly male with a total of 31 respondents (62%), most of them had junior high education level with a total of 24 respondents (48%), and the average age of mental disorders patients is 36.28 years old, with the youngest one 19 years old and the oldest 56 years old.

Sociodemographically, in accordance to the research of Chan & Yu (2004), which stated that the respondents were predominantly male (51.7%), age 26-45 years old (65.3%), while the education level is different (71.6%) since the respondents in this study had low education level. Most of the mental disorder patients are of productive age, male, and not working. Economic dependence and stigma increase the burden on patients and families.

According to Chan & Yu (2004) and Marshall (2021), mental disorders patients are significantly less satisfied with their quality of life. Besides experiencing mental disorder symptoms, they also share many difficulties, such as financial problems, unemployment, and lack of opportunity to participate in social activities due to stigma and discrimination. This has a significant impact on their quality of life. This research showed that out of 172 mental disorders patients in Hong Kong involved in the study, 100 respondents were unemployed and felt a lack of quality of life. Ramaprasad et al. (2015 in Keshavan, 2015) stated that elderly mental disorder patients experience a decrease in the rate of life related to age and disability, including physical, social, and other relationships.

### **The Difference in the Quality of Life of Respondents Before and After Occupational Therapy**

This research found a significant difference in scores before and after treatment in the intervention group receiving occupational therapy marked with a *p-value* of 0.00. In contrast, the control group had a notable difference in the quality of life score before and after *without occupational treatment before and after p-value* 0.07. This study also showed a significant contrast in mean difference in the quality of life scores between the intervention and control groups with a *p-value* of 0.00.

This research provides intervention in occupational therapy for mental disorder patients in the community with self-care activities, including personal hygiene exercises, eating, toileting, and taking medication (Cobo-Viscente et al., 2021; Gustafson et al., 2021; Jansen et al., 2021). Another activity was called productive activities or life skills. The patients received training on making brooms, starting from preparing materials, making brooms to practicing selling to neighbors. The last activity was called leisure time, which was done by doing hobbies, sports, watching television and others. Occupational therapy with these activities improves the quality of life of patients on physical, psychological, social, and environmental

dimensions (Franzsen et al., 2021; Nesbitt et al., 2021). Activities in occupational therapy focus on work and joint activities, studying everyday activities such as self-care, study, work, using leisure, play, rest and sleep, and social participation (Haertl, 2019). Patients with mental disorders show symptoms of low work performance, such as the inability of self-hygiene and self-presentation. This results in neglected daily activities because patients feel they are not important enough (Shorten & Crouch, 2014).

Based on the explanation above, occupational therapy activities conducted in this research were appropriate. For four weeks, they were self-care training, productive activities of making brooms, and utilizing leisure with sports, watching television, and other hobbies. After measuring the quality of life with WHOQOL-BREEF, there was an increase in the quality of life score, from 53.08 (before occupational therapy) to 64.08 (after occupational therapy); in other words, an increase of 11.0 points. Whereas in the group that did not receive occupational therapy, the score changed from 52.96 to 53.24 (only increase 0.28 threshold). Research on elderly patients with dementia treated by occupational therapy for five weeks improved their ability to do daily activities and reduced their dependence on caregivers, even though patients had limited ability to learn (Gunal et al., 2021; Gonzales et al., 2021). The assessment included the ability to function daily, both motor and process, and dependence on the caregiver (Graff et al., 2006).

This research also followed the opinion of Izzedin Sarsak, who explained that occupational therapy improves life skills. Work is an activity that has a purpose and meaningful functional activity from everyday life (ADL). The main goal of treatment is to increase the ability of individuals to participate in a job that they want, need, or are expected to do or modify the work or environment so that it is more supportive for them (Abotelabi et al., 2021; Rocco et al., 2021; Mahmoudi et al., 2021).

According to Izzeddin Sarsak (2019) and Estrany-Munar (2021), occupational therapy has several objectives: functional performance, leisure, quality of life, workability, stress management, and well-being.

a. Functional Performance

Occupational therapy improves an individual's functional abilities in independence, safety, and quality through therapeutic activities in daily life which are meaningful and meet individual needs.

b. Leisure

Occupational therapy allows individuals to participate actively and meaningfully in everyday life. Leisure activities integrate all aspects, including interaction with the environment, social activities and skills training, enhancement of cognitive functions such as reading, and motor skills such as sports.

c. Quality of life

Occupational therapy helps find life solutions, helps individuals achieve optimal function, and improves the quality of life based on their respective interests and life goals.

d. Stress management

Stress hurts physical aspects and emotional health. Occupational therapy could help manage stress by implementing various behavioral management



strategies (Onal et al., 2021). Occupational therapy is also a means of counseling, relaxation, and stress management with different individual and group programs (relaxation techniques, stress management, cognitive therapy, biofeedback, psychotherapy, etc.) that significantly reduce anxiety for the short or long term.

e. Well-being

One of the main goals of occupational therapy is patient involvement in daily activities that are meaningful and positively directed, thus affecting health and well-being. Many occupational therapy methods improve health and well-being, such as ergonomic training to accessibility, injury prevention to return to work programs, psychosocial programs, and helping individuals with cognitive and psychiatric disorders to improve their mental health (Spinord & Stenberg, 2021; Torpil & Kaya, 2021; Bourke et al., 2021).

Occupational therapy modalities with various activities create opportunities for patients to feel success, strengthen self-confidence, and learn from each other. Occupational therapy has a cultural advantage because it focuses on the patient's ability to function in a particular environment or habit, not merely on managing signs and symptoms (Izzeddin Sarsak, 2019).

Research Limit al (2007 in Lloyd & Williams, 2010) found that occupational therapy in patients with mental disorders is beneficial for health and recovery. It also stated that occupational therapy in patients with mental disorders in the acute setting showed a high patient involvement in treatment by 78% (50 of 64 participants). More than half of the participants involved in occupational therapy (both individually and in groups) experienced improvements in daily life functions and fulfillment of life's needs which made them more confident in their skills and abilities (Yamaga et al., 2021; Owen & Brown, 2021; Subramaniam et al., 2021). Occupational therapy can be used for long-term treatment and contribute to improved mental health.

#### 4. Conclusion

The characteristics of people with mental disorders are predominantly male with a total of 31 respondents (62%), most of them have junior high education level with 24 respondents (48%), the unemployed category has 36 respondents (72%), and the average age is 36.28 years old. A significant difference occurs in the quality of life score before and after the treatment in the intervention group with occupational therapy marked by a *p-value* of 0.00 ( $< 0.05$ ). In contrast, the control group has no significant difference in the quality of life score before and after *p-value* 0.07 ( $> 0.05$ ). There is also a notable contrast in the mean difference of quality of life scores between the intervention and control groups with a *p-value* of 0.00 ( $< 0.05$ ).

Occupational therapy could be used as rehabilitative therapy for treating mental disorders in the community and help improve the quality of life. Family or caregiver support to patients is very much needed for them to feel appreciated. Drug therapy must be routinely consumed as a supporting factor for stabilizing the patient's condition.

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